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Military/Civilian Trauma Institute with a Burn Center

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13. ABSTRACT (Maximum 200 Words) Original partners in the Trauma Institute are University of Texas Health Science Center and Brooke Army Medical Center, now joined by Wilford Hall Medical Center (USAF) and University Hospital. The original purpose was to study and demonstrate the feasibility of a Trauma Institute that would fulfill three primary missions (patient care, research, and education of medical students and residents) by building on the historical strengths of each of the Level 1 Trauma Centers in San Antonio, to include the Burn Center at BAMC. Combining resources will generate greater financial sustainability, ensuring that the civilian and armed forces populations have continued access to trauma and burn services. Members have created Organizational Principles, a Board of Directors and Command Council, contracted with a national trauma program consultant to conduct a review of financial/economic status of each program and with a legal firm to review issues related to military and civilian doctors providing services across traditional lines, recruited and hired a civilian Burn Surgeon to become the first civilian Director of the Burn Center at BAMC, successfully completed the process to gain community consent for trauma research, and developed a Regional Trauma Registry and Database for the 22-county service area.				
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Introduction:

The University of Texas Health Science Center at San Antonio (UTHSC) proposed to utilize \$1.814M in congressional funding to work collaboratively with Brooke Army Medical Center (BAMC), Wilford Hall Medical Center (WHMC) and University Hospital (UH). The awarded grant has enabled these partners to create the Trauma Institute of San Antonio, Texas (TRISAT), which is conducting a feasibility study and over the next months will implement a demonstration project establishing a joint military/civilian Trauma Institute with a burn center. Level I trauma care in Bexar County and South Texas is provided currently by three entities: UH in collaboration with UTHSC, BAMC, and WHMC. While all three programs have provided trauma care to the civilian population of Bexar County and South Texas, none of these entities has, as part of its official charter, the legal obligation to provide such care. These Level One trauma facilities serve not only Bexar County but State Trauma Service Area "P" (22 county region - 26,000 sq. miles.). In addition UHS and BAMC also serve an even larger area extending to all of South Texas. Although important and valuable to the region, this service is outside of the primary mission of all three institutions. Without the support of BAMC and WHMC, UH and UTHSC would be unable to supply sufficient resources to meet all of the trauma care needs within the region. Further, the trauma training that military physicians, nurses, and other health care providers receive by caring for civilian trauma patients is critical to their training and ability to care for soldiers, sailors, and airmen wounded in the battlefield.

TRISAT has three primary missions – patient care, research, and teaching of medical students, residents, nurses and other healthcare professionals. This collaborative proposal centers upon the historical strength of the burn center (US Army Institute of Surgical Research) at BAMC which is considered to be an important foundation for the Trauma Institute's future. Funding from the Department of the Army is not considered to be sufficient to keep the burn center operational in its current capacity; without this funding, the future of burn care for the military and civilian population in Bexar County and South Texas is threatened. Without a strong burn center, the army's commitment to burn care and research related to combat casualty care is also threatened. The collaborative nature of TRISAT permits all partners to take advantage of their individual strengths in the areas of patient care, research and teaching and creates a joint operation that is thought to have stronger sustainability to ensure that Bexar County, South Texas and our nation's armed forces have access to much needed trauma and burn care services. TRISAT is also improving the ability of UTHSC, BAMC and WHMC to provide stronger educational programs, thus enhancing mission readiness. Information gained and practices established from this review and feasibility study will benefit the larger endeavor of securing permanent comprehensive trauma services for Bexar County and South Texas through the collaborative efforts of UHS, UT, BAMC and WHMC.

Body:

The Statement of Work includes these tasks, which are each addressed in detail in this section:

1. Financial/economic review of current Level 1 trauma centers, the BAMC Burn Center, and trauma surgeon groups, military and civilian.
2. Legal review of issues, obstacles, and implications for military and civilian business with Medicare, Medicaid, and third party insurance companies
3. Market analysis of San Antonio and South Texas to assess impact of population/demographic projections, based on both civilian and military populations
4. Business Plan to move forward with approved recommendations based on the above
5. Management of trauma surgeon resources
6. Other opportunities for collaboration

In order to address these tasks, members formed a Board of Directors and Command Council, with a set of written Organizational Principles for management and governance of TRISAT. Staff includes a Project Coordinator and Research Assistant.

Financial/Economic Review

The TRISAT Board of Directors contracted with Bishop + Associates, a nationally recognized consultant specializing in trauma programs, to complete a financial review of the current status of each trauma program, burn center, and trauma surgeon group. The review includes practice patterns, resource utilization, cost structure, and reimbursement. The work began in January 2004, is nearing completion, and a final report will be presented on or about 30 July 2004. The Board will forward its recommendations to the Command Council, comprising the chief executive officers of member institutions, before 31 December 2004.

Legal Review

Through Bishop + Associates, the TRISAT Board also contracted with the law firm of McDermott, Will & Emery to conduct a review of current federal and state laws and regulations specific to military and civilian billing/collection relationships with Medicare, Texas Medicaid, and third party commercial insurers. The review has been completed and is specific to both allowable practices, and obstacles to be addressed.

Market Analysis

Project staff has gathered patient volumes for trauma and burn patients, hospitalization patterns, payor information, and demographic projections for San Antonio and South

Texas. This market analysis information will be included in the final Business Plan for TRISAT at the conclusion of the grant period.

Business Plan

The Business Plan will be developed at the conclusion of the feasibility study.

Trauma Surgeon Resources

The TRISAT Board recruited Dr. Steven Wolf to become the first civilian director of the Burn Center at BAMC. Dr. Wolf joined the Burn Center on 6 April 2004 and will also be responsible for clinical research in burns at the USAISR. Dr. Wolf is an employee of UTHSC on full-time assignment to the USAISR/Burn Center.

CPT Daren Danielson is a trauma surgeon in the USAF. Through this collaboration, he has joined UTHSC as a faculty member and is completing a two-year assignment at the civilian University Hospital as a member of the trauma surgeon team.

Dr. Kristin Biggs is a civilian trauma research fellow at UTHSC, currently on assignment for one year at WHMC.

Other Opportunities

TRISAT successfully completed the requirements to obtain community consent in lieu of individual informed consent for clinical research of an artificial hemoglobin product developed by Northfield Laboratories. Trauma surgeons presented research information to thirteen (13) community groups across our 22-county service area and participated in media coverage that resulted in IRB approval of the community consent process, which will be important to any future trauma-related clinical research.

TRISAT coordinated the development of the Regional Trauma Registry and Database project with the state's Regional Advisory Council for Trauma. All of the hospitals providing trauma services in 22 counties, and 35 EMS companies participate by utilizing the same trauma registry software. This is resulting in available, accessible and standardized patient data for clinical research conducted by TRISAT members.

Key Research Accomplishments

The purpose of this grant is not research. Key accomplishments other than research are addressed in the Body section of this report.

Reportable Outcomes:

Not applicable to the purpose of this grant

Conclusions:

Preliminary reports illustrate that there are significant opportunities for improved operations and financial outcomes through this collaboration. Given the increasing restrictions on reimbursement for civilian trauma services, whether delivered at civilian or military facilities, it is clear that any opportunity for increased revenue outside of government subsidization is advantageous. Generating increased revenue in these programs enhances our ability to conduct independent investigator-initiated research, extend training inside our institutions and beyond, and solidifies the presence of much-needed Level 1 trauma services to civilians and military services.

Both military trauma program directors have praised the accomplishment of recently deployed San Antonio trained staff. Physicians, nurses and enlisted members from the Army and Air Force utilized their skills obtained from daily trauma training in their respective Level 1 Trauma Centers. The wounded soldiers, sailors, airwomen and airmen benefited from their unique experience. During Operation Iraqi Freedom, the busiest Army Forward Surgical Team (FST) in the theater was commanded by an Army graduate of the Brooke Army Medical Center General Surgery and Surgical ICU Fellowship program. The US Army Burn Center trained >1100 personnel in a Combat Burn Life Support Course, while the San Antonio based Air Force trauma surgeons conducted six separate two-day courses training over 40 surgeons and 300 nurses and technicians in trauma medicine prior to these personnel being deployed as members of forward surgical teams at Air Force locations in support of Operation Iraqi Freedom. While the actual deployed status is significant, the intangible aspects of experience and confidence, derived from direct clinical practice in the military's only level I trauma centers, continues to save lives on the battlefield. Continued TRISAT research and clinical studies enable us to develop new protocols for trauma management that will save soldiers in future conflicts and victims of trauma at home.